12 August 2010

Mr. Phil Giudice
Commissioner
Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Subject: Comments on DOER Biomass RPS Rulemaking Process

Dear Commissioner Giudice,

We, the undersigned, collectively submit the following comments regarding the letter to the Department of Energy Resources ("DOER") from Secretary Bowles dated July 7, 2010 ("Bowles letter") and the ongoing rulemaking process regarding the qualification of biomass energy systems under the Massachusetts Renewable Portfolio Standard. This letter represents the concerns and recommendations of owners and developers of renewable bioenergy projects and technologies, Massachusetts-based companies, forest landowners, farmers, foresters, representatives of the business community and organized labor. Collectively we own and manage millions of acres of forestlands, employ or represent hundreds of thousands of workers across the Commonwealth and are collectively working to create the renewable energy economy that is so critical to the future of the Commonwealth.

The Secretary's request to DOER will define the role biomass can play in the Commonwealth's greenhouse gas reduction efforts and energy supply. In this vein, we have outlined our collective comments below. It is important to note that the some of the organizations associated with this letter will also be providing their own comments on the rule-making process.

In addition to providing our comments on the rule-making process, we would also like to caution the DOER against an over-reliance on the Manomet Study. The Manomet team has made a note-worthy addition to the significant body of scientific work on the topic of carbon accounting for bioenergy, but it is only a single study with a narrowly defined scope, and unfortunately has not been subjected to a thorough peer review. The Manomet Study dramatically under-represents the carbon benefits of bioenergy, and its methodology and findings are a major departure from other recent studies. It also fails to consider the carbon impacts of utilizing waste wood, makes no distinction between biomass (biogenic) and fossil-fuel (anthropogenic) carbon, and ignores the reality that forest growth continues to exceed harvest and mortality in the region.

In general, the new regulations should not have the practical effect of making biomass-fueled facilities *that meet reasonable GHG reductions and comply with the fuel supply sustainability requirement* categorically ineligible for the RPS. With this in mind, we encourage DOER to consider the following while drafting the new regulations:

1. Regarding the proposed minimum efficiency standard, this requirement should be no more specific than "maximum practicable efficiency as determined by DOER." Specific minimum efficiency thresholds should be relegated to guidelines, and should be "technology-specific." In addition, these efficiency requirements should not be applied retroactively, as it is generally not possible to increase the efficiency of a plant once it is built and operating. Existing facilities and RPS-eligible projects should be allowed to maintain or obtain their eligibility, provided they can comply with reasonable GHG reduction and fuel supply sustainability requirements. While encouraging CHP and thermal applications is important, DOER should recognize the valuable role that facilities developed based on electricity sales play in helping to create and sustain CHP and thermal applications. DOER should also recognize the fact that electricity is a more refined, high-value product and the market barriers that exist that make the successful development of CHP applications difficult (and, in reality, the achievement of 60% efficiency nearly impossible in most cases, especially with lower heating value fuels). Contrary to the assertion in paragraph 1) of the Bowles Letter, the Green Communities Act does not contemplate a 60% efficiency standard in the context of the eligibility criteria under the RPS. This is an arbitrary threshold and, while laudable as a goal, there is no basis for DOER to establish this as a minimum requirement for all facilities that would otherwise qualify by meeting reasonable GHG and fuel supply sustainability requirements. It's also important to note that the RPS was put in place to incentivize the development of renewable *electricity* and to exclude projects that meet all reasonable criteria would be questionable from a legal perspective.

2. Issues related to fuel supply sustainability would be best addressed through a set of practical and enforceable guidelines developed in consultation with DCR and forest products industry experts. In this case, guidelines would be more appropriate than regulations due to the need to consider site-specific conditions and land management objectives. In addition, generally accepted standards for sustainable forestry practices should serve as the basis to establish the amount and types of forest residues that qualify for RPS eligibility, rather than arbitrary requirements such as the "50% of tops and branches" set forth in paragraph 4) of the Bowles Letter.

   Any fuel supply restrictions should allow RPS eligibility for all forms of waste wood and residues. Waste wood and residues should include sustainably-sourced forestry slash (e.g. limbs and tops); unused residues from mill operations; forest thinnings removed either to reduce forest fire risk or to allow select trees to attain a merchantable size more quickly; woody biomass removed to reduce or contain disease, insect infestation, or invasive species; or to restore ecosystem health; and non-forestry waste from the agriculture industry including orchard and agricultural prunings, urban tree trimmings and other biogenic materials that would otherwise be discarded. In Massachusetts, requirements for "sustainable forestry practices" should be achieved and verified using forest cutting plans *approved* by licensed foresters according to MGL c. 132, rather than requiring landowners to hire licensed foresters to prepare said cutting plans.

For fuel that is sourced outside of Massachusetts, the forestry management practices should be regulated by the harvesting practices of that state.

3. Life cycle accounting of the greenhouse gas implications of using biomass for energy is an important step toward developing a sound set of incentives under the Renewable Portfolio Standard. While the Manomet study provides a deeper understanding of the issues and their complexity, significant additional work is needed to develop a cohesive biomass lifecycle methodology that is applicable not only to Massachusetts but also to the geographic area beyond the Commonwealth and must take into account the full range of potential biomass crops and resources, including urban wood wastes, mill residues, and forestry residues and thinnings. Massachusetts will be best served by assembling a group of forestry experts, academics, industry experts, and national NGOs to develop an appropriate lifecycle methodology using the best available science. One possible avenue would be for the state to commission an impartial study through the National Academy of Sciences or the National Renewable Energy Laboratory.

4. The merits of sustainably sourced waste wood and forestry residues should be recognized, especially in light of overwhelming scientific and NGO support for their use. In fact, even the authors of the Manomet study recognize the benefit of waste wood and residues. In a clarification issued on June 21, 2010, Manomet stated "when the wood used to fuel an energy facility is all, or nearly all, logging debris that would have decomposed in the forest anyway, the [carbon] debt period can be relatively short." A recent paper co-authored by researchers from The Nature Conservancy and the University of Minnesota found that the use of waste biomass "incur[s] little or no carbon debt and can offer immediate and sustained GHG advantages." [1] The U.S. EPA came to a similar conclusion in the preamble to the final changes to the renewable fuel standard promulgated in 2010, stating "EPA believes that renewable fuel produced from feedstocks consisting of wastes that would normally be discarded or put to a secondary use, and which have not been intentionally rendered unfit for productive use, should be assumed to have little or no land use emissions of GHGs."[2] The World Wildlife Fund, in its Position Paper on Bioenergy, supports the use of waste and by-products as a source of bioenergy.[3]

[1] Fargione, J., J. Hill, D. TIlman, S. Polasky, P. Hawthorne. "Land Clearing and the Biofuel Carbon Debt" *Science* Published online February 7, 2008; 10.1126/science.1152747.
[2] "Regulation of Fuels and Fuel Additives: Changes to Renewable Fuel Standard Program; Final Rule." *Federal Register* **75**, 58 (March 26, 2010): 14670-14904.
[3] WWF. "WWF Position Paper on Bioenergy – June 2008."
http://assets.panda.org/downloads/wwf_position_paper_on_bioenergy_291107.pdf

In conclusion, we hope that the DOER finds the above comments helpful and request that the DOER considers them as the draft regulations are prepared. As you are aware, many of the organizations party to this letter have made significant investments based upon the assumption of eligibility under the RPS program. Since the inception of the RPS program, biomass facilities have been the largest source of RECs[4], and with an ample supply of both sustainably harvested and non-forest derived biomass, the potential growth is great, provided the appropriate regulatory environment exists. We also believe that the aggressive renewable energy goals mandated by the Green Communities Act will be extremely difficult (if not impossible) to meet without the existence of sustainably harvested and non-forest derived biomass.

In striving towards the goals of increased renewable energy generation and greenhouse gas reductions, Massachusetts is asking developers and investors of all kinds to place a great deal of faith in the various regulatory programs. To drastically change direction without clear, peer-reviewed, science-based reasons will no doubt send a warning to current and future investors not only of biomass facilities but other renewable and energy efficiency technologies, as well.

We appreciate the opportunity to submit these comments and look forward to continuing to be involved in the process moving forward.

Sincerely,

Associated Industries of Massachusetts
Berkshire Renewable Power
Biomass Power Association
Crane & Co.
Covanta Energy Corporation
Environmental Business Council of New England, Inc.
Epsilon Associates
Forest Landowners Association, Inc.
Harvest Power, Inc.
Madera Energy, Inc.
Massachusetts Farm Bureau Federation
Massachusetts Forest Landowners Association
Massachusetts Laborers District Council
Massachusetts Wood Producers Association

[4] According to the most recent Annual RPS Compliance Report, biomass accounts for 39.2% of Compliance by Generator Type.

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National Alliance of Forest Owners
New Fuels Alliance
Northeast Utilities
NRG Energy
Pinetree Power Fitchburg
Plum Creek
ReEnergy Holdings
Society of American Foresters (Yankee Division)
Waldron Engineering & Construction, Inc.
W.D. Cowls, Inc. Land Company